

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 7612

Petition of Central Vermont Public Service Corporation )	
for approval of its "Smart Power Plan", to implement )	Technical Hearing held at
Advanced Metering Infrastructure throughout its service )	Montpelier, Vermont
territory— )	May 26, 2010

Order entered: 8/6/2010

PRESENT: James Volz, Chairman  
David C. Coen, Board Member  
John D. Burke, Board Member

APPEARANCES: Jeanne Elias, Esq.  
for Vermont Department of Public Service

Carolyn Browne Anderson, Esq.  
Morris L. Silver, Esq.  
for Central Vermont Public Service Corporation

Sandra Levine, Esq.  
for Conservation Law Foundation

**ORDER RE: ADVANCED METERING INFRASTRUCTURE PLAN**

**I. INTRODUCTION**

In this Order, the Vermont Public Service Board ("Board") approves the "SmartPower Plan" filed by Central Vermont Public Service Corporation ("CVPS" or "Company") for the implementation of Advanced Metering Infrastructure ("AMI") ("SmartPower Project") in its service territory. By this Order, the Board also approves a Memorandum of Understanding (the "Docket 7612 MOU") between the Vermont Department of Public Service ("Department") and CVPS, subject to certain clarifications set out in the findings below. With this approval, the non-power cost cap in CVPS's Alternative Regulation Plan ("ARP") is increased by the amount of cost-effective investments made in accordance with its SmartPower Plan.

## **II. BACKGROUND AND PROCEDURAL HISTORY**

On September 30, 2008, the Board issued an Order in Docket 7336 approving a Stipulation between CVPS and the Conservation Law Foundation ("CLF") that committed CVPS to fully implement AMI as fast as it reasonably could under a timetable to be approved by the Board, and to introduce demand/load response programs for all customer classes and cost-justified dynamic pricing where appropriate and consistent with the Company's rate-design plan filed in Docket 7095.

On August 3, 2009, the Board issued an Order in Docket 7307 approving a Memorandum of Understanding ("Docket 7307 MOU"), with certain modifications, among the Department and interested parties, including CVPS. The Docket 7307 MOU provides a regulatory framework for the review and approval of utility-specific AMI Implementation Plans and supporting Business Case Analysis.

On April 7, 2010, CVPS filed its utility-specific AMI Implementation Plan including the supporting Business Case ("SmartPower Plan") and the Docket 7612 MOU. The Board opened Docket 7612 to consider CVPS's SmartPower Plan and appointed Andrea McHugh, Utilities Analyst, to serve as the Hearing Officer in the proceeding. The Docket 7612 MOU between the Department and CVPS sets forth the parties' agreements concerning the SmartPower Plan and incorporates by reference the terms and conditions of the Docket 7307 MOU as approved and modified by the Board in its August 9 Order.

On April 30, 2010, the Hearing Officer held a prehearing conference in this docket. CLF filed a motion to intervene in this proceeding on the same date. No party objected to CLF's motion; the motion to intervene was granted. At the prehearing conference, CVPS requested that the Board hear this case directly. Subsequently, the Board agreed to do so. Also on April 30, 2010, CVPS filed direct testimony and exhibits in support of its SmartPower Plan and the Docket 7612 MOU. Although CLF was not a party to the Docket 7612 MOU, it made no objections to the terms of the MOU nor to the testimony and exhibits filed by CVPS in support of its proposal.

On May 14, 2010, Board staff conducted a workshop at which CVPS made a presentation on its SmartPower Plan. CVPS responded to questions raised by Board staff and the workshop participants which included Department staff and CLF. On May 18 and 24, 2010, CVPS filed supplemental information in support of its SmartPower Plan.

On May 21, 2010, the Department filed testimony and exhibits in support of the approval of the SmartPower Plan and the Docket 7612 MOU. CLF did not file any testimony in this docket.

On May 26, 2010, the Board held a technical hearing and heard the evidence in this matter. The parties stipulated to the admission of the transcript of the May 14 workshop, the presentation made by CVPS at the workshop, and the supplemental filings made by CVPS in response to the questions raised by Board staff into the record.

In response to further requests by the Board, CVPS filed additional information on June 9, 10, and 15, 2010. On June 16, 2010, CVPS and the Department filed proposed findings and a proposal for decision in this matter.

On June 21, 2010, CVPS informed the Board that it had discovered a discrepancy related to the timing of projected benefits associated with the SmartPower Project. CVPS indicated that when the discrepancy is reconciled, the Net Present Value ("NPV") of benefits would be reduced by an amount between \$280,000 and \$500,000. CVPS stated that the SmartPower Project would continue to yield a positive NPV benefit and that the discovery of this discrepancy "does not affect the Company's conclusion that it is appropriate to move forward with the SmartPower Project." CVPS also stated that it would provide additional information relating to this matter if the Board made such a request.

On July 1, 2010, CVPS responded to the Board's request for additional information related to the impact of the discrepancy on the reduction of potential benefits realization. CVPS calculated a positive NPV of benefits of \$1.41 or \$1.63 million depending on the assumed application of benefits. In its filing, CVPS included a motion for a protective order related to parts of its response. No party commented on the motion and it is granted.

In its July 1 filing, CVPS provided an explanation of the impact of the discrepancy, including detailed calculations to illustrate an updated cost/benefit analysis. CVPS cited to the

SmartPower Plan: "As more information on costs and benefits becomes available, the Plan and Business Case will be updated to provide current information to stakeholders including the Board and the Department."<sup>1</sup>

On July 7, 2010, the Department filed a response to CVPS's June 18 letter regarding the discovery of the discrepancy. The Department requested that CVPS provide further information related to potential benefits prior to the issuance of an Order approving the SmartPower Plan. The Department also suggests that the Board require CVPS to develop a more precise Measurement and Verification Plan to track progress made in benefit realization and to update the cost estimates to include the cost of meters that will be recovered from ratepayers due to the early retirement of meters. We address the Department's concerns in the Discussion section below.

### **III. FINDINGS**

#### *General*

1. The SmartPower Plan describes CVPS's strategies and schedule for the introduction of AMI within its service territory and includes plans for the introduction of AMI technology and associated hardware, software, and two-way communications systems that collect time-differentiated energy usage from meters. The SmartPower Plan also includes strategies to introduce new rate designs including dynamic pricing and Demand Response ("DR") programs. Exh. CVPS-2 at 3.

2. Beginning in 2008, the electric utilities in the state, the Department, and a variety of interested parties participated in the Board's investigation to define the core requirements for utilities that propose to implement smart metering and time-based rates (Docket No. 7307). In that proceeding, a mechanism was developed for interested utilities to work with the Department to seek advance agreement on that utility's AMI Plan. The process sets the framework for a utility-specific MOU between the utility and the Department to be submitted for Board approval. Mertens pf. at 1-2.

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1. Exh. CVPS-2 at 4.

3. CVPS and the Department recognize that the SmartPower Plan provides a structure for AMI implementation, rather than a detailed action plan. The Department supports CVPS's decision to move forward with implementation at this time. Mertens pf. at 2.

#### *Docket 7307 Requirements*

4. The SmartPower Plan was developed in accordance with the requirements of the Docket No. 7307 MOU as modified by the Board. Exh. CVPS-2 at 3.

5. The Docket 7307 MOU, as approved by the Board, is incorporated by reference as if set forth in full within the SmartPower Plan. Exh. CVPS-1 at 2.

6. The SmartPower Plan includes a Business Case that describes the cost/benefit and rate impact analysis developed by CVPS to estimate and assess the cost-effectiveness of the proposed SmartPower Project. Exh. CVPS-2 at 39-68, Attachment A, and Attachment D.

7. CVPS worked collaboratively with the Department; the Department actively participated in the development of the SmartPower Plan which documents the strategy and rationale for the SmartPower Project. Kowalczyk pf. at 3; Mertens pf. at 1; Behrns pf. at 2.

8. As each major milestone approaches in the implementation of the SmartPower Plan, the Department expects to engage with CVPS to review the chosen solution. Mertens pf. at 2.

9. The SmartPower Plan puts the framework in place to move forward with the SmartPower Project. Behrns pf. at 2.

10. The SmartPower Plan satisfies the criteria set forth in the Docket 7307 MOU, and is reasonable. Mertens pf. at 2; Jordan pf. at 3; exh. CVPS-1 at 3.

#### *U.S. Department of Energy Funding*

11. The SmartPower Project will be partially funded by a grant from the U.S. Department of Energy ("DOE") pursuant to the Smart Grid Investment Grant ("SGIG") Program established under the American Recovery and Reinvestment Act ("ARRA"). Exhs. CVPS-4 and CVPS-5; Kowalczyk pf. at 13.

12. The SmartPower Project is being pursued in coordination with the eEnergy Vermont Project that worked to secure funding from the DOE under the SGIG Program. When completed,

it is expected that CVPS will receive reimbursement for up to fifty percent of qualifying costs through the eEnergy Vermont SGIG Program. The CVPS Business Case was developed based on this assumption. Exh. CVPS-2, Attachment A; Kowalczyk pf. at 13.

13. As a result of this funding, the rate impacts of the SmartPower Project are expected to be materially reduced. Kowalczyk pf. at 13.

14. CVPS must satisfy applicable DOE requirements and implementation schedules in order to obtain the maximum benefit of the SGIG Program award. Kowalczyk pf. at 14.

15. Under the terms of the SGIG Program award, CVPS must complete the Project by April 2013. Kowalczyk pf. at 10.

#### *Widespread Introduction of AMI Technologies*

16. The SmartPower Plan provides that CVPS will implement AMI and grid automation<sup>2</sup> technology across its electric system, and integrate a Meter Data Management System ("MDMS") and other information technologies with new communications capabilities and functionalities to enable enhanced customer services and to capture operational efficiencies. Exh. CVPS-2 at 5 and 14-24.

17. The Vermont Electric Power Company, Inc. ("VELCO") is developing a fiber optic network that will be used for backhaul network communications to support smart-grid activities. Exh. CVPS-2 at 5.

18. CVPS is collaborating with Green Mountain Power Corporation ("GMP") and the Vermont Telecommunications Authority to implement necessary intermediate network capabilities to link the meter networks located in individual neighborhoods to the backhaul network as well as to follow through with grid automation. Exh. CVPS-2 at 22-23.

19. The Company also collaborated with GMP on an AMI Request for Proposal ("RFP") for the purchase of individual advanced metering systems. The goal of the joint RFP is to seek a common AMI solution and seize any cost efficiencies resulting from meter network equipment

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2. Grid automation is not included in the SmartPower Plan. The ARRA funding for this grid automation is estimated to be \$2 million. The Plan will be updated to include grid automation after detailed scoping is completed.

that can be shared in areas where CVPS and GMP service territories abut, as well as common vendor services. Kowalczyk pf. at 9.

20. AMI will provide CVPS customers with the opportunity to obtain enhanced information about their energy usage so that they can take a more active role to improve the efficiency with which they use electricity. Kowalczyk pf. at 5.

21. The ability to measure customer usage in small time intervals through the deployment of smart meters will provide CVPS the opportunity to offer new dynamic and other time-based rate designs, including DR programs. Educational tools such as web-based presentment of actual usage information and market prices, and new forms of communication to customer homes, are also emerging in the marketplace. In combination, smart meters, new rate designs, educational tools, and communication channels will allow customers to review their energy usage and make decisions that could potentially have a direct impact on their bills. Exh. CVPS-2 at 36.

22. The SmartPower Plan identifies project goals, implementation schedules, and evaluation criteria. Exhs. CVPS-2 at 3-5.

23. As described in the SmartPower Plan, the AMI system will enable energy efficiency measures to be implemented on the customer side of the meter, including in-home displays and end-use controls. The Plan describes a coordinated approach to develop methods to share AMI-enabled customer usage information with Efficiency Vermont ("EVT") as appropriate. Exh. CVPS-2 at 37-38.

24. The SmartPower Plan identifies specific functional and operational applications and capabilities. Exh. CVPS-2 at 29-36.

#### *Smart Rates for Customers*

25. The SmartPower Plan details CVPS's strategy to implement AMI-enabled services including new rate offerings. Exh. CVPS-2 at 29-36; Anderson pf. at 2-4.

26. The prospect that consumers across Vermont and New England will be able to respond to price signals and thus reduce peak demand over time is a central benefit of the Smart Grid and AMI specifically. Jordan pf. at 2.

27. CVPS will offer its customers web-based presentment of actual electric usage as near to real time as is practical and provide customer education regarding new products and services. Web-based presentment of actual usage will be available to 100% of customers on a next-day basis. Tr. 5/14/10 at 57-58 (Gamble); exh. CVPS-2 at 29 and 31.

28. AMI-enabled rate design strategies are evolving. CVPS is collaborating with the Department and other Vermont utilities to identify appropriate designs. Anderson pf. at 2.

29. The SmartPower Plan provides that CVPS will develop dynamic pricing programs over time and make rate-design filings with the Board for review and approval. Exh. CVPS-2 at 36.

30. As part of the eEnergy Vermont Project, CVPS has committed to conduct a Peak Time Rebate ("PTR") randomized control trial beginning in 2012. By October 1, 2011, CVPS will file a proposed rate design and tariff, or tariffs, for a new voluntary real-time-pricing option, or options, for small General Service and Residential customers. Exhs. CVPS-2 at 36, CVPS-4 and CVPS-5.

31. The SmartPower Plan includes provisions for customer education and outreach related to dynamic pricing, including DR programs. Exhs. CVPS-2 at 6 and 20, and CVPS-7: tr. 5/14/10 at 60 (Gamble) and 61 (Kraus).

32. CVPS will work collaboratively with the other members of the eEnergy Vermont Program to identify opportunities for integrating individual utility customer education plans into a statewide communication plan to facilitate effective and consistent messaging to Vermonters. Exh. CVPS-2 at 21.

#### *New Services for Customers*

33. CVPS will investigate and enable several new service offerings as contemplated under the SmartPower Plan. Exh. CVPS-2 at 30-35.

34. The SmartPower Plan includes each of the seven minimal functional requirements, plus five other features from the additional features list (identified in the SmartPower Plan as "Optional Features"), described in the Docket 7307 MOU. CVPS will pursue the "Optional Features" when the benefits associated with the specific feature are determined to outweigh the costs. Jordan pf. at 3.



35. The AMI-enabled services to be deployed under the SmartPower Plan include:

- a. Automated meter reading;
- b. Presentment of customer bills, usage information and other account management tools on the internet;
- c. Power outage and restoration notification to the Company;
- d. Meter voltage detection;
- e. Enhanced Direct Load Control for Rate 3 Service;
- f. Data Access for EVT;
- g. Capability to provide an off-cycle customer bill;
- h. Development of tamper detection capability;
- i. Ability to perform a remote meter rate change;
- j. Implementation of a virtual whole house service switch;
- k. Home Area Network ready infrastructure; and
- l. Ability to collect data for engineering studies and analysis.

Additional service enhancements are detailed in the Smart Power Plan. Exh. CVPS-2 at 30-35.

36. CVPS commits to implement AMI and the service enhancements incrementally in conjunction with customer education. After CVPS has adequately tested and verified the integrity of its revenue cycle, including customer bills, it plans to deploy additional service enhancements. Customer outreach and education through bill flyers, media, and direct mailings will be used to keep customers informed during project implementation. Tr. 5/14/10 at 68-69 (Anderson); CVPS-2 at 72.

37. AMI may allow for implementation of emerging Smart Grid concepts and technologies such as vehicle-to-grid, distribution automation, and distributed generation. However, the benefits that may arise from these concepts and technologies are not included in the Business Case; nor are the costs that might need to be incurred in the future to bring these concepts to fruition. CVPS commits to engage with stakeholders as it considers the costs and benefits of functional requirements not included in the SmartPower Plan. Exh. CVPS-2 at 4 and 29.

38. The SmartPower Plan is a document that will continue to evolve over time as new technologies become available and as additional information is acquired, including the response of customers to dynamic rates. Behrns pf. at 2.

*Collaboration with Stakeholders*

39. CVPS plans to proceed with the introduction of AMI in a collaborative fashion as part of the eEnergy Vermont Project in order to help promote interoperability between and among the Vermont distribution utilities, VELCO, and EVT. Exh. CVPS-2 at 82-83.

40. CVPS has adequately incorporated collaboration on a statewide level into its SmartPower Plan. Mertens pf. at 6.

*Costs and Benefits*

41. As described in the Docket 7307 MOU, the Business Case includes:

- a. the estimated costs of deploying an AMI system and establishing Dynamic Pricing, new AMI-enabled rate designs, and DR programs as contemplated under the plan;
- b. the estimated costs associated with the integration of the proposed AMI system with legacy software systems and other indirect costs from systems supporting the AMI technology;
- c. any operational savings expected to be obtained during the time the AMI system and associated Dynamic Pricing, AMI-enabled rate designs, and DR programs are in place;
- d. the estimated costs for the plant retirements expected to result from the implementation of the proposed AMI system (these costs are included in the rate impact analysis but are not reflected in the cost/benefit analysis);
- e. the estimated severance costs anticipated to be incurred as a result of the implementation of the proposed AMI system; and
- f. other estimated quantifiable costs and benefits attributable to the implementation of the AMI system.

Anderson pf. at 5.

42. The AMI implementation described in the SmartPower Plan is expected to be cost-effective for CVPS and its customers. The analysis in support of this conclusion is contained in the Business Case. Kowalczyk pf. at 6; exh. CVPS-2 at 39-65, Attachments A and D.

43. The estimated benefits associated with the SmartPower Plan are shown to be greater than the costs as determined by a cost-effectiveness test. Kowalczyk pf. at 6-7; Anderson pf. at 5; and Behrns pf. at 9.

44. The implementation of the SmartPower Plan may create difficult to quantify but potentially compelling benefits for customers that are not likely to accrue in the absence of the full deployment of the Project. CVPS and the Department expect that unanticipated benefits will emerge after AMI deployment. Kowalczyk pf. at 7; Jordan pf. at 3.

*Cost Recovery*

45. The cost recovery provisions set forth in Docket 7307 MOU are incorporated into the SmartPower Plan. Exh. CVPS-2 at 74-77.

46. CVPS has requested that these terms and conditions be implemented as a "new initiative adder" in accordance with the amendments to the ARP pending approval before the Board in Docket No. 7586. Ryan pf. at 3.

47. The SmartPower Plan provides that CVPS will be able to recover all incremental costs that are prudently incurred and that quantifiable benefits will be realized and applied to reduce costs. Cost recovery and benefit recognition will occur by applying standard ratemaking practices, principles, and precedents. Behrns pf. at 5.

48. Approved cost and benefit realization amounts will be included in CVPS's base rate filings provided such amounts meet the known and measurable standard. Any amounts incurred during a rate year that are not included or did not meet the known and measurable standard will be deferred and charged as either a regulatory asset for costs or as a regulatory liability for benefits. These amounts will be subsequently subject to review before inclusion in rates in the next base rate adjustment. Behrns pf. at 6; tr. 5/26/10 at 52-54 (Ryan).

49. Under the terms of the Docket 7612 MOU, the Department will have the opportunity to review all costs incurred in accordance with the SmartPower Plan in order to ascertain that each expense was prudently incurred. Tr. 5/26/10 at 55-56 (Ryan).

50. The SmartPower Plan provides that the cost cap on non-power costs will be adjusted to accommodate incremental costs and benefits. In other words, the non-power-cost cap may increase by the amount of the known and measurable SmartPower Plan expenses for the rate year. Exh. CVPS-2 at 77; Behrns pf. at 6.

51. In the event that the ARP is suspended or terminated, CVPS will seek approval for implementation of cost recovery terms and conditions as otherwise called for under the SmartPower Plan and the Docket 7612 MOU. Exh. CVPS-2 at 77.

*Review Process to Update and Change the SmartPower Plan*

52. The SmartPower Plan provides that CVPS will monitor changed circumstances, adapt the Plan as needed, and update its Business Case accordingly. Kowalczyk pf. at 15.

53. The SmartPower Plan establishes a Review Process that includes monitoring and reporting requirements. It also describes a change process ("Change Control Process") as well as a major milestone financial commitment review process. Kowalczyk pf. at 15.

54. In accordance with the SmartPower Plan, the Department may seek recovery of costs incurred to utilize additional resources in order to fulfill its review responsibilities. In this case, the Department would notify CVPS of the need for a consultant and provide a cost estimate for the services. CVPS would incorporate these costs into its updated Business Case. Kowalczyk pf. at 15.

55. As described in the Docket 7612 MOU, the Review Process provides that CVPS will:

- (1) demonstrate that it has followed its SmartPower Plan since the last review and include a comparison of actual results achieved with those contemplated under the Plan as contemplated under ¶ 54(K) of the Docket 7307 MOU;
- (2) modify the Smart Power Plan and the Business Case as new information becomes available to ensure that decisions, forward expenditures, and cost-of-service filings submitted for ratemaking purposes are based on the most recent information available at the time as contemplated under ¶¶ 41-48 and 55 of the Docket 7307 MOU; and
- (3) seek stakeholder support prior to making major milestone financial commitments as defined in the SmartPower Plan.

Exh. CVPS-1 at 3.

56. The Change Control Process described in the SmartPower Plan governs the submission, evaluation, and authorization of all material changes to the Plan. A material change may involve a modification to the schedule, budget, or scope, including the provision for minimum functional requirements as identified in the Docket No. 7307 MOU. Exh. CVPS-2 at 78.

57. To the extent that CVPS and the Department are unable to reach agreement with respect to a material change, CVPS or the Department may independently file a request with the Board seeking approval to amend the SmartPower Plan. Exh. CVPS- 2 at 78-79.

58. The Review Process may require CVPS to provide confidential information to the Department. Allegedly confidential information that is relevant to the ongoing review of the SmartPower Plan may be subject to the Protective Order issued in this docket. Exh. CVPS-1 at 3.

#### **IV. DISCUSSION**

Under the terms of the Docket 7612 MOU, the Department and CVPS assert that the SmartPower Plan is reasonable and recommend that the Plan be approved by the Board. We agree and approve the Plan subject to the limitations described in the Docket 7612 MOU. The Department believes that long-term value will accrue to utilities and consumers from the smart grid build-out.<sup>3</sup> As described in our August 3, 2009, Order in Docket 7307, we recognize the potential value of a smart grid in Vermont. After reviewing the SmartPower Plan and the testimony in support of the Plan, we find that the implementation of AMI in CVPS's service territory is in the public interest, especially in light of the SGIG award received by the eEnergy Vermont Project from the U.S. DOE that will substantially reduce the cost to ratepayers. Below, we explain the scope of our approval of the CVPS SmartPower Plan.

In our August 3 Order, we adopted the Docket 7307 MOU provision allowing a utility discretion to seek pre-approval of its AMI implementation plan. In that Order, we stated that "we expect that any utility AMI implementation plan that is significant in scope will be submitted to the Board for review and approval."<sup>4</sup> As the SmartPower Plan involves AMI deployment throughout the CVPS service territory, the Plan is significant in scope. CVPS has demonstrated a thoughtful analysis of its Plan to implement AMI in its service territory which includes potential services to offer its ratepayers. We recognize the efforts of CVPS to collaborate with the Department on its proposal; and based on the Docket 7612 MOU, the Department supports

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3. Behrns pf. at 4.

4. Docket 7307 Order of 8/3/09 at 32-33.

CVPS's decision to move forward with AMI implementation at this time. We also agree with the assertion made in the Docket 7612 MOU that the Plan satisfies the criteria set forth in the Docket 7307 MOU.

The CVPS SmartPower Project is designed to be implemented as part of the eEnergy Vermont Project. It is being developed to promote interoperability among the Vermont distribution utilities, VELCO, and EVT.<sup>5</sup> The Department recognizes that by adopting open architecture and working collaboratively with the other utilities, CVPS has demonstrated leadership.<sup>6</sup> We also recognize CVPS's efforts to collaborate with stakeholders by its participation in the eEnergy Vermont Project and encourage CVPS to continue these efforts.

We are pleased that the eEnergy Vermont Project collaborators were successful in their effort to obtain ARRA funding commitments through the DOE's SGIG award. Given that CVPS will be eligible to receive reimbursement for up to 50% of eligible costs expended for AMI implementation in its service territory, we expect that the rate impacts of the SmartPower Project will be materially reduced. We anticipate that CVPS will regularly reassess its financial decisions as it approaches major milestones outlined in the SmartPower Plan and that the SGIG funding will be utilized to continue to mitigate the rate impact of AMI implementation.

We recognize that the terms of the SGIG program require CVPS to satisfy DOE requirements and implementation schedules and to complete the SmartPower Project by April 2013. As the Department recognizes, making the right long-term choices for AMI technology is "a formidable undertaking."<sup>7</sup> It appears that the SmartPower Plan provides flexibility for CVPS to move forward with AMI implementation in order to meet these goals while continuing to ensure that its approach for technology decisions remains reasonable.

According to the most recent information provided by CVPS, the Internal Revenue Service ("IRS") has not issued a definitive ruling on the taxability of the SGIG funding which would flow through a partnership to a corporate subrecipient such as CVPS. Although counsel for CVPS has

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5. Kowalczyk pf. at 5.

6. Mertens pf. at 5.

7. Mertens pf. at 4.

opined that the funds will not be taxable, absent a ruling from the IRS, this issue cannot be fully resolved.<sup>8</sup>

CVPS's Business Case and rate impact analysis are modeled on the basis that the SGIG funding would not be subject to any reduction for taxes. Our approval of the SmartPower Plan is based on this assumption. If the IRS determines that the SGIG funding will be taxed, the contribution that the grant would make towards the recovery of costs would be reduced. Should this be the case, CVPS has stated that it will undertake further analysis and as appropriate negotiate with the DOE to modify its portion of the eEnergy Vermont project based on the award amount net of taxes. It appears that under the current Business Case scenario, if the SGIG funding is taxed, the Smart Grid investments may no longer be cost-effective. Thus, we cannot now determine whether CVPS's SmartPower Plan, as currently proposed, would promote the general good if less than the full SGIG funding is available to CVPS. Should it be determined that the SGIG funds are taxable income, we require CVPS to file an update to the SmartPower Plan in order to demonstrate that the Smart Grid investments continue to be cost-effective.

CVPS has provided a detailed Business Case, including a cost/benefit analysis, to support its decision to implement AMI in its service territory. Based on this analysis, the SmartPower Project is expected to be cost-effective for CVPS and its customers.<sup>9</sup> CVPS maintains that the benefits expected to arise under the Plan will help to lower costs for the Company and enhance service offerings for its customers.<sup>10</sup> According to the latest estimate provided by CVPS, the NPV of benefits expected to result from the implementation of the SmartPower Plan would be a positive amount of \$1.41 million or \$1.63 million, depending on the application of DR benefits assumed in the calculation.<sup>11</sup> Accordingly, CVPS has estimated that the benefits will be greater than the costs associated with AMI implementation.

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8. CVPS response to Board Record Request dated June 15, 2010.

9. Kowalczyk pf. at 6.

10. Kowalczyk pf. at 6.

11. July 1, 2010, Response of Scott Anderson, CVPS, to Board Request for Additional Information.

CVPS also asserts that implementation of the SmartPower Plan will create additional substantial benefits for its customers that are difficult to quantify. CVPS maintains that while these benefits are not generally included in the financial analysis, they should be considered in an assessment of costs and benefits.<sup>12</sup> CVPS states that "these benefits are likely to include but are not limited to the creation of operating efficiencies, improved service, enhanced service offerings, reduced costs as well as quantifiable power cost savings."<sup>13</sup>

On balance, CVPS has demonstrated that its Plan is likely to be cost-effective and should be approved. The bulk of the benefit associated with its SmartPower Plan will arise from operational savings; CVPS's estimates include only those DR benefits expected to occur through the initial deployment. We agree that additional benefits, both quantitative and qualitative, may potentially accrue with full deployment of AMI, implementation of new rate designs, and use of on-premises technology.

An integral component of the SmartPower Plan provides for customer outreach and education so that customers can more effectively manage their electricity consumption. As the Department explains in its testimony, the success of AMI implementation is dependent on the adoption of alternative use programs by a great number of consumers.<sup>14</sup> CVPS will need to continually evaluate its customer outreach and education programs to determine whether changes should be made to maximize benefit realization. Adequate customer education efforts will also ensure that customers are apprised of the potential benefits expected to accrue on an individual basis as a result of AMI implementation. The Department indicates that it will play a significant, ongoing role to ensure that the consumer interest is adhered to as CVPS proceeds with its SmartPower Plan.<sup>15</sup>

The terms contemplated under the SmartPower Plan have been designed to integrate with the CVPS ARP as a New Initiatives Adder. The New Initiatives Adder is under review in Docket

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12. Kowalczyk pf. at 7.

13. Kowalczyk pf. at 8.

14. Paruch pf. at 4.

15. Paruch pf. at 4.



7586 and a final determination has not been made in that proceeding. Accordingly, with this approval, the non-power-cost cap in CVPS's ARP may be increased by the amount of cost-effective investments made in accordance with its SmartPower Plan. In other words, the non-power-cost-cap may increase by the amount of the known and measurable SmartPower Plan expenses for the rate year.

Both CVPS and the Department acknowledge that the SmartPower Plan provides a structure, rather than a detailed action plan. As such, further involvement of the Board and Department will be necessary as the Plan is refined in order for CVPS "to avail itself of all the cost recovery terms and conditions contemplated under the Docket 7307 MOU as modified and approved."<sup>16</sup> Accordingly, CVPS will follow the Review Process outlined in the Plan as it proceeds with AMI implementation.

In our August 3 Order in Docket 7307, we stated: "Our determination that a [AMI Implementation] Plan is acceptable will not shield a utility from a subsequent investigation and potential disallowance based upon the economic used-and-useful principle if events following approval should have led to an alteration of the AMI deployment."<sup>17</sup> In several areas, CVPS has provided general information rather than details on specific decisions. For example, CVPS has not yet selected the vendor to provide individual advanced metering systems.<sup>18</sup> Additionally, CVPS's cost estimates include a contingency adder that ranges from 10% to 40%. We caution CVPS that, at this time, our approval of the SmartPower Plan is limited to the overall framework, and not to specific budget line items; we expect CVPS to utilize the Review Process set forth in the Plan if it wishes to have some greater guarantee of cost recovery.

The SmartPower Plan provides that material changes proposed by CVPS and supported by the Department will be filed with the Board to take effect in 30 days, unless acted upon by the Board.<sup>19</sup> We do not accept this proposal. Instead, any material change that CVPS files with the

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16. Exh. CVPS-1 at 4.

17. Docket 7307 Order of 8/3/09 at 36.

18. Kowalczyk pf. at 9.

19. Exh. CVPS- 2 at 79.

Board for review and approval will not be considered approved until we affirmatively state so. The Board will make efforts to ensure that these material changes are reviewed as quickly as possible, and within 30 days, if CVPS makes that request. If CVPS asks for an expedited approval process, we expect CVPS to provide an explanation to justify its request, as well as all of the necessary supporting documentation for Board review.

Under the SmartPower Plan, the Board will have full opportunity to review all CVPS project expenditures prior to the recognition of those expenses in retail rates. In addition, the Board will have an opportunity to review all updates to the SmartPower Plan. The approval and acceptance of its Business Case will control the scope of the amounts that may be booked and deferred under the cost recovery procedures and agreement under the Docket 7612 MOU.

The review process set forth in the SmartPower Plan is designed to provide a meaningful process for Department review and Board action. It will also serve to minimize delays in the implementation schedule. As such, it satisfies the objectives of the regulatory review process of paragraph 42 of the Docket 7307 MOU.

Finally, we wish to address the Department's July 7 filing related to CVPS's discrepancy in the NPV calculation. In this filing, the Department asserts that "a decision to invest significant Federal, State, and ratepayer dollars for such a project should carry a concomitant commitment to strive to obtain the maximum amount of benefits achievable through that investment." Therefore, as requested by the Department, we require CVPS to develop a more comprehensive Measurement and Verification Plan to track costs and benefits of the SmartPower Project. We encourage CVPS to work with the Department on this effort.

In the July 7 filing, the Department also expresses concern related to the reduction of the benefit values in the current SmartPower Plan as compared with the previous analysis presented by CVPS in 2008.<sup>20</sup> As part of the ongoing review process, we direct CVPS to work with the Department to further assess the potential benefits and attempt to quantify these impacts to address the Department's concerns. In the course of this analysis, CVPS should also consider the impact of the cost of meters that will be recovered from ratepayers due to the meters' early retirement.

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20. See exh. CVPS-2, Attachment B: Meter and Grid Automation Strategic Business Plan as of July 2008.

### **V. CONCLUSION**

When we examine all elements of the SmartPower Plan along with the terms and conditions of the Docket 7612 MOU, we find that the CVPS SmartPower Plan proposal is reasonable, and the Board supports CVPS's decision to move forward with AMI implementation at this time.

### **VI. ORDER**

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The Docket 7612 Memorandum of Understanding between Central Vermont Public Service Corporation and the Vermont Department of Public Service concerning the implementation of the SmartPower Plan is approved.

2. The SmartPower Plan is approved consistent with the terms of the Docket 7612 Memorandum of Understanding and the Docket 7307 Memorandum of Understanding, as approved and modified by the Public Service Board.

3. The Review Process called for under the SmartPower Plan satisfies the objectives of the regulatory review processes set forth in the Docket 7307 Memorandum of Understanding and is therefore approved.

4. Material changes to the SmartPower Plan proposed by Central Vermont Public Service Corporation and supported by the Department of Public Service shall be filed with the Public Service Board for approval.

5. If the Smart Grid Investment Grant funding is determined to be taxable income, Central Vermont Public Service Corporation shall file an update to the SmartPower Plan for approval and such filing shall address whether the investments made under the SmartPower Plan continue to be cost-effective.

6. To the extent that Central Vermont Public Service Corporation and the Department of Public Service are unable to reach agreement with respect to a material change, Central Vermont

Public Service Corporation or the Department of Public Service shall independently file a request with the Public Service Board seeking approval to amend the SmartPower Plan.

7. The non-power-cost cap in Central Vermont Public Service Corporation's Alternative Regulation Plan shall be increased by an amount equal to SmartPower Plan investments that are cost-effective and consistent with the requirements of the Docket 7612 Memorandum of Understanding.

8. This Order does not constitute a finding of prudence with respect to any individual cost set forth in the SmartPower Plan. However, compliance with the SmartPower Plan and related Public Service Board Orders shall entitle Central Vermont Public Service Corporation to the cost recovery protections, assurances, and treatment set forth in the SmartPower Plan, the Docket 7612 Memorandum of Understanding, and the Docket 7307 Memorandum of Understanding, as modified and approved.

9. The Protective Agreement for use in the administration of the SmartPower Plan is approved.

10. Central Vermont Public Service Corporation shall serve copies of any compliance rate filings made in accordance with the SmartPower Plan on all parties to this Docket. Nothing in this Order authorizes the implementation of any specific rate change or rate design except as may be approved or allowed by the Public Service Board.

11. Central Vermont Public Service Corporation shall develop a comprehensive Measurement and Verification Plan to track costs and benefits of the SmartPower Project. The Measurement and Verification Plan shall be filed within 60 days of the issuance of this Order.

Dated at Montpelier, Vermont, this 6<sup>th</sup> day of August, 2010.

<u>s/ James Volz</u>	)	
	)	PUBLIC SERVICE
	)	
<u>s/ David C. Coen</u>	)	BOARD
	)	
	)	OF VERMONT
<u>s/ John D. Burke</u>	)	

OFFICE OF THE CLERK

FILED: August 6, 2010

ATTEST: Susan M. Hudson  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.*